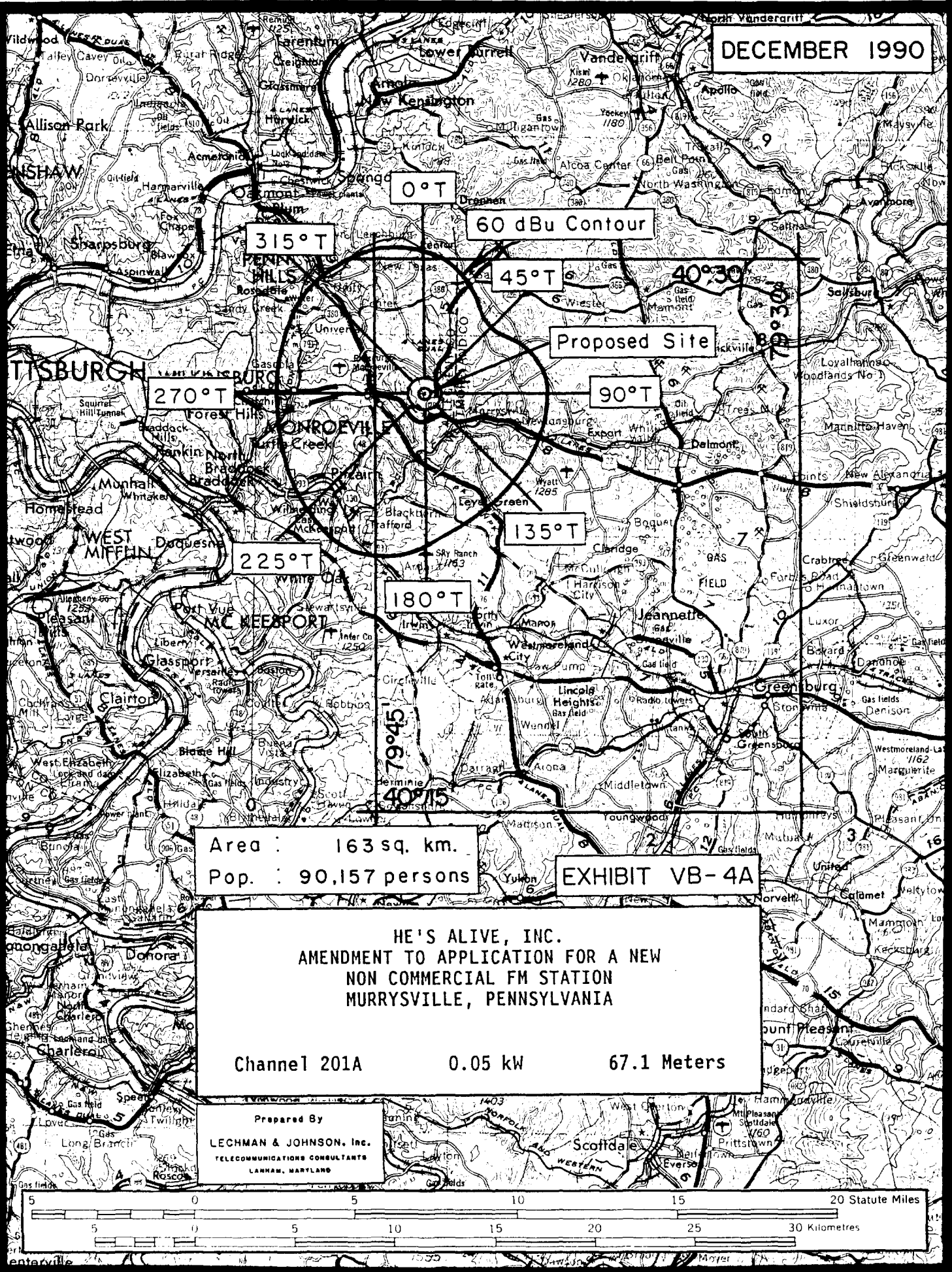


DECEMBER 1990



Area : 163 sq. km.
Pop. : 90,157 persons

EXHIBIT VB-4A

HE'S ALIVE, INC.
AMENDMENT TO APPLICATION FOR A NEW
NON COMMERCIAL FM STATION
MURRYSVILLE, PENNSYLVANIA

Channel 201A 0.05 kW 67.1 Meters

Prepared By
LECHMAN & JOHNSON, Inc.
TELECOMMUNICATIONS CONSULTANTS
LANNAM, MARYLAND

EXHIBIT VB-5

ALLOCATIONS OF FM STATIONS UNDER THE
CANADA & UNITED STATES AGREEMENT

HE'S ALIVE, INC.
AMENDMENT TO APPLICATION FOR A NEW
NON COMMERCIAL FM STATION
MURRYSVILLE, PENNSYLVANIA

Channel 201A 0.05 kW 67.1 Meters

The proposed FM station's transmitter site is located 219 km from the Canada/United States border. The proposed FM station operates on Channel 201A (88.1 MHz), with an effective radiated power (ERP) of 0.05 kilowatts (kW), and an effective antenna height above average terrain (HAAT) of 67.1 meters. The maximum parameters and minimum separation for Class A station under the working agreement between United States and Canada are as follows:

Maximum Parameters

Class A	Effective Radiated Power	3.0 kilowatts
	Antenna Height Above Average Terrain	91.4 Meters

Minimum Separation in kilometers

Class A	<u>Co-ch</u>	<u>200</u>	<u>400</u>	<u>600</u>
	144.8	80.5	40.25	32.2

The proposed FM station's effective radiated power (ERP) and effective antenna height above average terrain (HAAT) are less than the maximum parameter allowed. The proposed site is located a distance of 219 km from the Canada/U.S. border, which is greater in distance than the minimum separation requirement for any class of station. Therefore, this instant proposal satisfies all requirements under the working arrangement of the U.S./Canadian agreement of 1947.

DECEMBER 1990

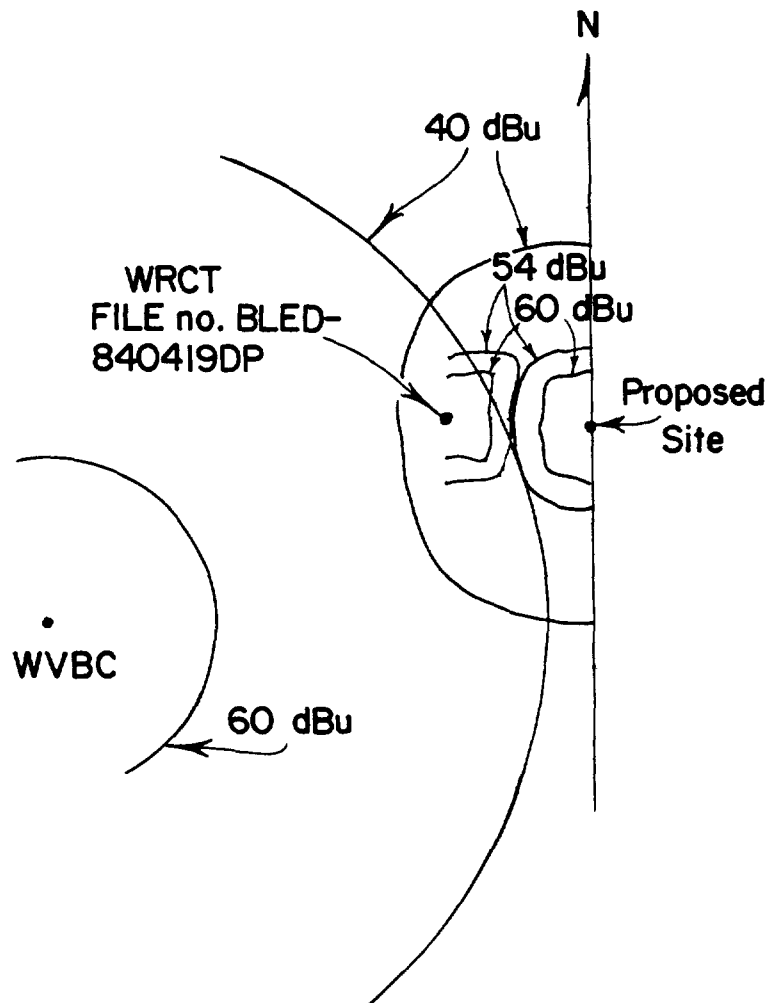


EXHIBIT 6

HE'S ALIVE, INC.
AMENDMENT TO APPLICATION FOR A NEW
NON COMMERCIAL FM STATION
MURRYSVILLE, PENNSYLVANIA

Channel 201A

0.05 kW

67.1 Meters

Prepared By
LECHMAN & JOHNSON, Inc.
TELECOMMUNICATIONS CONSULTANTS
LANNAM, MARYLAND

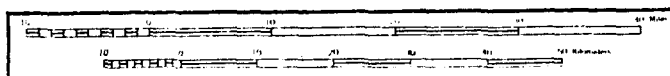


EXHIBIT VB-7A

TV CHANNEL 6 INTERFERENCE STUDY

HE'S ALIVE, INC. AMENDMENT TO APPLICATION FOR A NEW NON COMMERCIAL FM STATION MURRYSVILLE, PENNSYLVANIA

Channel 201A 0.05 kW 67.1 Meters

The nearest TV Channel 6 station to be evaluated under Section 73.525 of the Rules is WJAC-TV, Johnstown, Pennsylvania. WJAC-TV is located 63 km east of the proposed site as shown on Exhibit VB-7B. The proposed site is outside of WJAC's Grade A contour.

The interference area was computed as follows. Eight points were chosen from outside of the Grade A contour and inside of the Grade B contour of WJAC-TV. A lotus of four points were located on the 66 dBu contour of WJAC-TV referenced to radial bearings of 0° T, 225° T, 270° T and 315° T from the proposed FM site. The other four points were located on the 67 dBu contour of WJAC-TV (radial bearing 45° T, 90° T, 135° T, 180° T from the proposed site). For the WJAC-TV's 66 and 67 field strength contours, the appropriate undesired-to-desired signal ratio for Channel 201 are -4.25 dB and -4.5 dB respectively (U/D values are obtained from Section 73.599, Figure 1). For the WJAC-TV's 66 dBu and 67 field strength contours, there is an associated FM F(50,10) interference signal strength of 61.75 dBu and 63.5 dBu respectively. An adjustment of 6 dB was added to the proposed FM station's interference contour in accordance with Section 73.535(e)(i)(iii) to compensate for TV receiving antenna directivity. These values are given in Table V. Exhibit VB-7B is a map showing the interference area drawn from the data contained in Table V.

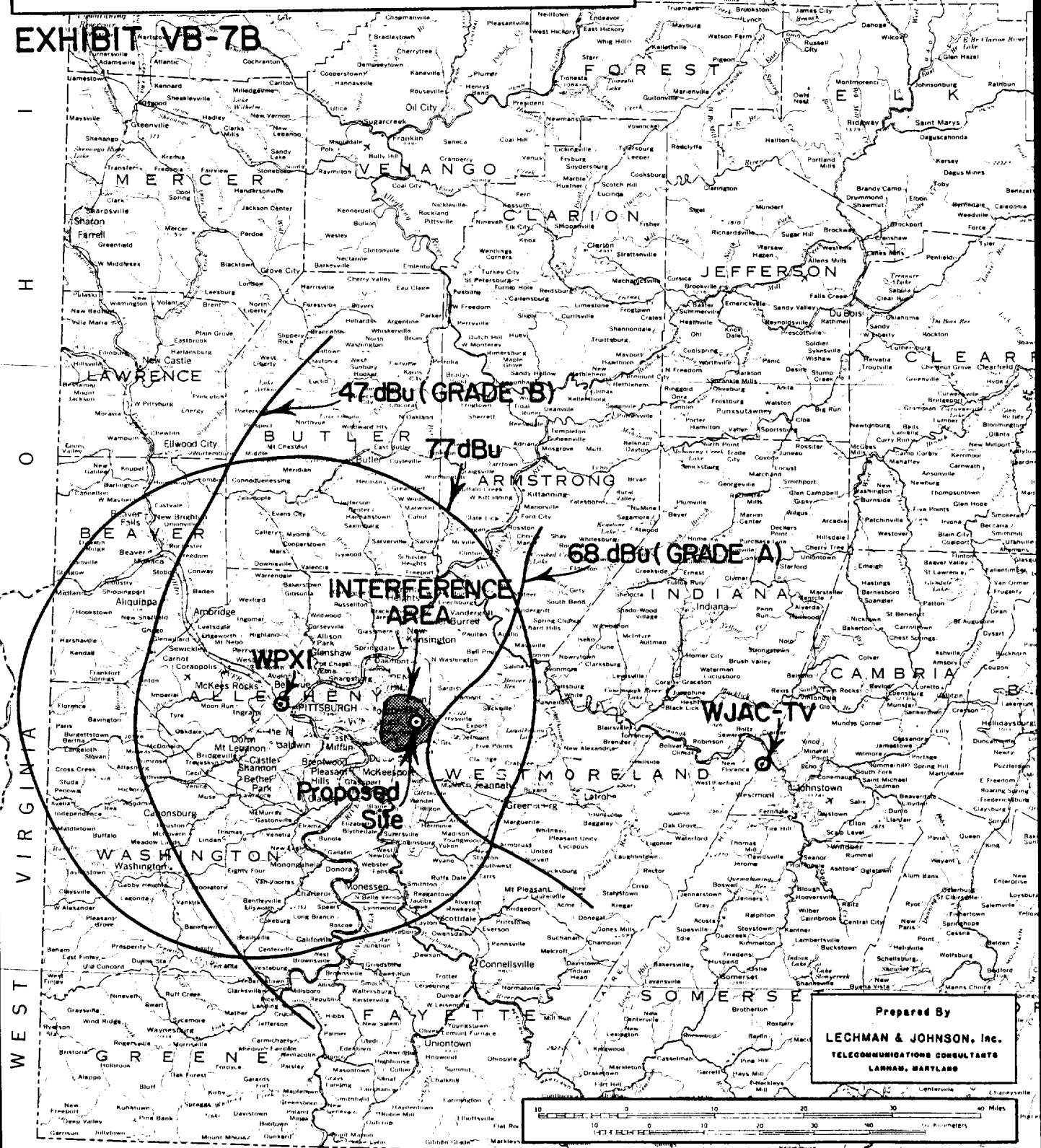
Television Station WPXI, Pittsburgh, Pennsylvania is located 24 km west of the proposed FM site as shown in Exhibit VB-7B. WPXI is an NBC affiliate operating on Channel 11. WJAC also is an NBC affiliate. The predicted TV Channel 6 interference area is within the city grade contour (77 dBu) of WPXI and completely outside of WJAC-TV's ADI Market. In accordance with Section 73.535(e)(3)(iii), the population outside the Grade A contour of WJAC-TV and within the interference area that lies within the city grade contour of another station carrying the same programming material can be subtracted from the number of people predicted to receive interference because of network duplication. Therefore, the number of people predicted to receive interference is none as shown on Exhibit VB-7B. Since the number of people within the interference area is less than 3000 people, this instant proposal is in compliance with Section 73.525 of the Rules and Regulations.

DECEMBER 1990

HE'S ALIVE, INC.
AMENDMENT TO APPLICATION FOR A NEW
NON COMMERCIAL FM STATION
MURRYSVILLE, PENNSYLVANIA

Channel 201A 0.05 kW 67.1 Meters

EXHIBIT VB-7B



Prepared By
LECHMAN & JOHNSON, Inc.
TELECOMMUNICATIONS CONSULTANTS
LHANNA, MARYLAND

EXHIBIT VB-8

RADIATION LEVEL

HE'S ALIVE, INC.
AMENDMENT TO APPLICATION FOR A NEW
NON COMMERCIAL FM STATION
MURRYSVILLE, PENNSYLVANIA

Channel 201A 0.05 kW 67.1 Meters

The following calculations are performed in order to determine, whether the proposed FM station has significant environmental effect.

Computations

FM Facilities

The calculations to determine power density (mW/cm²) and power density level of all FM facilities are computed by using the following equation.

$$\text{Power density in mW/cm}^2 (S) = \frac{(0.64) (1.64) (\text{Total ERP in Watts}) (1000 \text{ milliwatts } 1 \text{ watt})}{\pi (\text{Center of Radiation in cm})^2}$$

For the proposed FM facility, the total ERP is 0.10 kW and the center of radiation is 30 m. Therefore, power density for the proposed FM facility is 0.0035 mW/cm².

TV Facilities

The calculations to determine power density (mW/cm²) and power density level of TV facilities are computed by using the following equation.

$$\text{Power density in mW/cm}^2 (S) = \frac{(2.56) (1.64) 100 (F^2) (0.4 \text{ VERP} + \text{AERP})}{4 \pi (\text{center of radiation in meters})^2}$$

For WPTT(TV) Station, VERP is 5000 kW, AERP is 500 kW, F is 0.1, and center of radiation is 243.6 meters. Therefore, power density for WPTT (TV) is 0.014 mW/cm².

Conclusion

The computation of the power density for the proposed FM station was performed in accordance with OST Bulletin No. 65, Evaluating Compliance with FCC specified Guidelines for Human Exposure to Radiofrequency Radiation. The power density of the proposed FM facility is 0.0035 mW/cm². The power density of WPTT(TV) is 0.014 mW/cm². The total power density for the TV and proposed FM facilities is 0.0175 mW/cm². Since this value is less than 1.0, the proposed facility is in compliance with OST Bulletin No. 65 and the ANSI standards.

Section V-B - FM BROADCAST ENGINEERING DATA

FOR COMMISSION USE ONLY

File No. _____

ASB Referral Date _____

Referred by _____

Name of Applicant

HE'S ALIVE, INC.

Call letters *(if issued)*

Is this application being filed in response to a window? ☐ Yes ☒ No

NEW

If Yes, specify closing date: _____

N/A

Purpose of Application: *(check appropriate boxes)*

☒ Construct a new (main) facility

☐ Construct a new auxiliary facility

☐ Modify existing construction permit for main facility

☐ Modify existing construction permit for auxiliary facility

☐ Modify licensed main facility

☐ Modify licensed auxiliary facility

If purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

☐ Antenna supporting-structure height

☒ Effective radiated power

☐ Antenna height above average terrain

☐ Frequency

☐ Antenna location

☐ Class

☐ Main Studio location

☒ Other *(Summarize briefly)*

To amend BPED-900606MC

File Number(s) BPED-900606MC

1. Allocation:

Channel No.	Principal community to be served:		
201	City	County	State
	Murrysville	Westmoreland	PA

Class *(check only one box below)*

☒ A ☐ B1 ☐ B ☐ C3

☐ C2 ☐ C1 ☐ C ☐ D

2. Exact location of antenna.

- (a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark.
2.4 km and 307° True direction of Murrysville Post Office. (Existing WPTT-TV tower, Allegheny Co., Monroeville,)
- (b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.

Latitude	40° 26' 23"	Longitude	79° 43' 11"
----------	-------------	-----------	-------------

3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? ☒ Yes ☐ No

If Yes, give call letter(s) or file number(s) or both.

WPTT-TV, Licensee Ch.22

If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any.

No changes to the WPTT-TV existing tower

SECTION V-B - FM BROADCAST ENGINEERING DATA (Page 2)

4. Does the application propose to correct previous site coordinates?

☐ Yes ☒ No

If Yes, list old coordinates.

Latitude	0	'	"	Longitude	0	'	"
----------	---	---	---	-----------	---	---	---

5. Has the FAA been notified of the proposed construction?

☐ Yes ☒ No

If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available.

Exhibit No.
N/ADate N/A Office where filed N/A

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

Landing Area	Distance (km)	Bearing (degrees True)
(a) <u>Pittsburgh- Monroeville</u>	<u>3.75</u>	<u>282°</u>
(b) <u>Wyatt (Pvt)</u>	<u>7.15</u>	<u>124°</u>

7. (a) Elevation: *(to the nearest meter)*(1) of site above mean sea level; 371.9 meters(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and 252.7 meters(3) of the top of supporting structure above mean sea level $[(a \times 1) + (a \times 2)]$ 624.6 meters(b) Height of radiation center: *(to the nearest meter)* H = Horizontal; V = Vertical(1) above ground 30 meters (H)30 meters (V)(2) above mean sea level $[(a \times 1) + (b \times 1)]$ 401.9 meters (H)401.9 meters (V)(3) above average terrain 67.1 meters (H)67.1 meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required in Question 7 above, except item 7(b)(3). If mounted on an AM directional-array element, specify heights and orientations of all array towers, as well as location of FM radiator.

Exhibit No.
VB-1

9. Effective Radiated Power:

(a) ERP in the horizontal plane 0.05 kw (H*) 0.05 kw (V*)

(b) Is beam tilt proposed?

☐ Yes ☒ No

If Yes, specify maximum ERP in the plane of the tilted beam, and attach as an Exhibit a vertical elevational plot of radiated field.

Exhibit No.
N/AN/A kw (H*) N/A kw (V*)

*Polarization

SECTION V-B - FM BROADCAST ENGINEERING DATA (Page 3)

10. Is a directional antenna proposed?

☐ Yes ☒ No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s) and tabulations of horizontally and vertically polarized radiated components in terms of relative field.

Exhibit No.
N/A

11. Will the main studio be located within the 70 dBu or 3.16 mV/m contour?

☒ Yes ☐ No

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125.

Exhibit No.
N/A

12. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast *(except citizens band or amateur)* radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-induced intermodulation interference?

☒ Yes ☐ No

If Yes, attach as an Exhibit a description of any expected, undesired effects of operations and remedial steps to be pursued if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by receiver-induced or other types of modulation) to facilities in existence or authorized or to radio receivers in use prior to grant of this application. *(See 47 C.F.R. Sections 73.315(b), 73.316(d) and 73.318.)*

Exhibit No.
2

13. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction D for Section V. Further, the map must clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No.
VB-3A&
VB-3B

Murrysville, PA

14. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.
VB-4A&
VB-4B

Pittsburgh, PA

(a) the proposed transmitter location, and the radials along with profile graphs have been prepared;

(b) the 1 mV/m predicted contour and, for noncommercial educational applicants applying on a commercial channel, the 3.16 mV/m contour; and

(c) the legal boundaries of the principal community to be served.

15. Specify area in square kilometers (1 sq. mi. = 2.59 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 163 sq. km.

Population 90,157

16. Attach as an Exhibit a map *(Sectional Aeronautical charts where obtainable)* showing the present and proposed 1 mV/m (60 dbu) contours.

Exhibit No.
N/A

Enter the following from Exhibit above:

Gain Area N/A sq. mi.
Loss Area N/A sq. mi.

Percent change (gain area plus loss area as percentage of present area) N/A %.

If 50% or more this constitutes a major change. Indicate in question 2(c), Section I, accordingly.

17. For an application involving an auxiliary facility only, attach as an Exhibit a map (*Sectional Aeronautical Chart or equivalent*) that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.
N/A

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license. See 47 C.F.R. Section 73.1675. (File No.: N/A)

18. Terrain and coverage data (*to be calculated in accordance with 47 C.F.R. Section 73.311*).

Source of terrain data: (*check only one box below*)

☐ Linearly interpolated 30-second database

☐ 7.5 minute topographic map

(Source: _____)

- ☒ Other (*briefly summarize*) on file with the FCC, and verified by using 7½ minute topographic quadrangle map/

From the data taken from WPTT (formerly WPFO) station records,

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted Distances to the 1 mV/m contour (kilometers)
0	67.2	7.0
45	30.3	4.7
90	50.2	6.1
135	52.9	6.3
180	79.4	7.7
225	93.7	8.4
270	74.2	7.4
315	88.9	8.1

Allocation Studies

(See Subpart C of 47 C.F.R. Part 73)

19. Is the proposed antenna location within 320 kilometers (199 miles) of the common border between the United States and Mexico?

☐ Yes ☒ No

If Yes, attach as an Exhibit a showing of compliance with all provisions of the Agreement between the United States of America and the United Mexican States concerning Frequency Modulation Broadcasting in the 88 to 108 MHz band.

Exhibit No.
N/A

20. Is the proposed antenna location within 320 kilometers of the common border between the United States and Canada?

☒ Yes ☐ No

If Yes, attach as an Exhibit a showing of compliance with all provisions of the Working Agreement for Allocation of FM Broadcasting Stations on Channels 201-300 under The Canada-United States FM Agreement of 1947.

Exhibit No.
VB-5

21. If the proposed operation is for a channel in the range from channel 201 through 220 (88.1 through 91.9 MHz), or if this proposed operation is for a class D station in the range from Channel 221 through 300 (92.1 through 107.9 MHz), attach as an Exhibit a complete allocation study to establish the lack of prohibited overlap of contours with other U.S. stations. The allocation study should include the following: See Engineering Statement- Table I, Table IV

Exhibit No.
VB-6

- (a) The normally protected interference-free and the interfering contours for the proposed operation along all azimuths.
- (b) Complete normally protected interference-free contours of all other proposals and existing stations to which objectionable interference would be caused.
- (c) Interfering contours over pertinent arcs of all other proposals and existing stations from which objectionable interference would be received.
- (d) Normally protected and interfering contours over pertinent arcs, of all other proposals and existing stations, which require study to show the absence of objectionable interference.
- (e) Plot of the transmitter location of each station or proposal requiring investigation, with identifying call letters, file numbers and operating or proposed facilities.
- (f) When necessary to show more detail, an additional allocation study will be attached utilizing a map with a larger scale to clearly show interference or absence thereof.
- (g) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire Exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
- (h) The name of the map(s) used in the Exhibit(s).

22. With regard to any stations separated by 53 or 54 channels (10.6 or 10.8 MHz) attach as an Exhibit information required in 1/ *(separation requirements involving intermediate frequency (i.f.) interference)*.

Exhibit No.
N/A

23.(a) Is the proposed operation on Channel 218, 219, or 220?

☐ Yes ☒ No

(b) If the answer to (a) is yes, does the proposed operation satisfy the requirements of 47 C.F.R. Section 73.207?

☐ Yes ☐ No N/A

(c) If the answer to (b) is yes, attach as an Exhibit information required in 1/ regarding separation requirements with respect to stations on Channels 221, 222 and 223.

Exhibit No.
N/A

(d) If the answer to (b) is no, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose.

Exhibit No.
N/A

1/. A showing that the proposed operation meets the minimum distance separation requirements. Include existing stations, proposed stations, and cities which appear in the Table of Allotments; the location and geographic coordinates of each antenna, proposed antenna or reference point, as appropriate; and distance to each from proposed antenna location.

SECTION V-B - FM BROADCAST ENGINEERING DATA (Page 6)

- (e) If authorization pursuant to 47 C.F.R. Section 73.215 is requested, attach as an Exhibit a complete engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following:

Exhibit No.
N/A

- (1) Protected and interfering contours, in all directions (360°), for the proposed operation.
- (2) Protected and interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as transmitter location.
- (3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur.
- (4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
- (5) The official title(s) of the map(s) used in the exhibits(s).

24. Is the proposed station for a channel in the range from Channel 201 to 220 (88.1 through 91.9 MHz) and the proposed antenna location within the distance to an affected TV Channel 6 station(s) as defined in 47 C.F.R. Section 73.525?

☒ Yes ☐ No

If Yes, attach as an Exhibit either a TV Channel 6 agreement letter dated and signed by both parties or a map and an engineering statement with calculations demonstrating compliance with 47 C.F.R. Section 73.525 for each affected TV Channel 6 station.

Exhibit No.
VB-7A &
VB-7B

See Engineering Statement - Table II & Table V

25. Is the proposed station for a channel in the range from Channel 221 to 300 (92.1-107.9 MHz)?

☐ Yes ☒ No

If Yes, attach as an Exhibit information required in 1/. (Except for Class D (secondary) proposals.)

Exhibit No.
N/A

26. Environmental Statement (See 47 C.F.R. Section 1.1301 et seq.)

Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact?

☐ Yes ☒ No

If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311.


Exhibit No.
N/A

If No, explain briefly why not. The proposed site is categorically excluded from environmental processing under the provisions of Section 1.1306 of the FCC Rules and Regulations.

See Exhibit VB-8

CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

Name (Typed or Printed)	Relationship to Applicant (e.g., Consulting Engineer)
LALIN FONSEKA	Telecommunications Consultant
Signature	Address (Include ZIP Code)
	LECHMAN & JOHNSON, INC. 9500 Annapolis Road, Suite C-1 Lanham, Maryland 20706
Date	Telephone No. (Include Area Code)
December 13, 1990	(301) 577-0800

DECEMBER 1990

EXHIBIT VB-4B

HE'S ALIVE, INC.
AMENDMENT TO APPLICATION FOR A NEW
NON COMMERCIAL FM STATION
MURRYSVILLE, PENNSYLVANIA

Channel 201A

0.05 kW

67.1 Meters

Prepared By
LECHMAN & JOHNSON, Inc.
TELECOMMUNICATIONS CONSULTANTS
LARMAN, MARYLAND

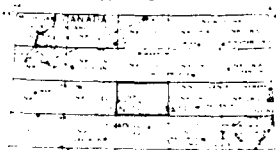
Scale 1:250,000

CONTOUR INTERVAL: 100 FEET
PRELIMINARY CONTOURS AT 50 FOOT INTERVALS
TRANSVERSE MERCATOR PROJECTION

NOTES: THE FOLLOWING INFORMATION IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT A GUARANTEE OF THE ACCURACY OF THE DATA. THE USER OF THIS INFORMATION SHALL BE RESPONSIBLE FOR THE RESULTS OF ANY ACTION TAKEN BASED ON THIS INFORMATION.

NATIONAL SURVEY DENVER COLORADO 80225 OR RESTON VIRGINIA 22092

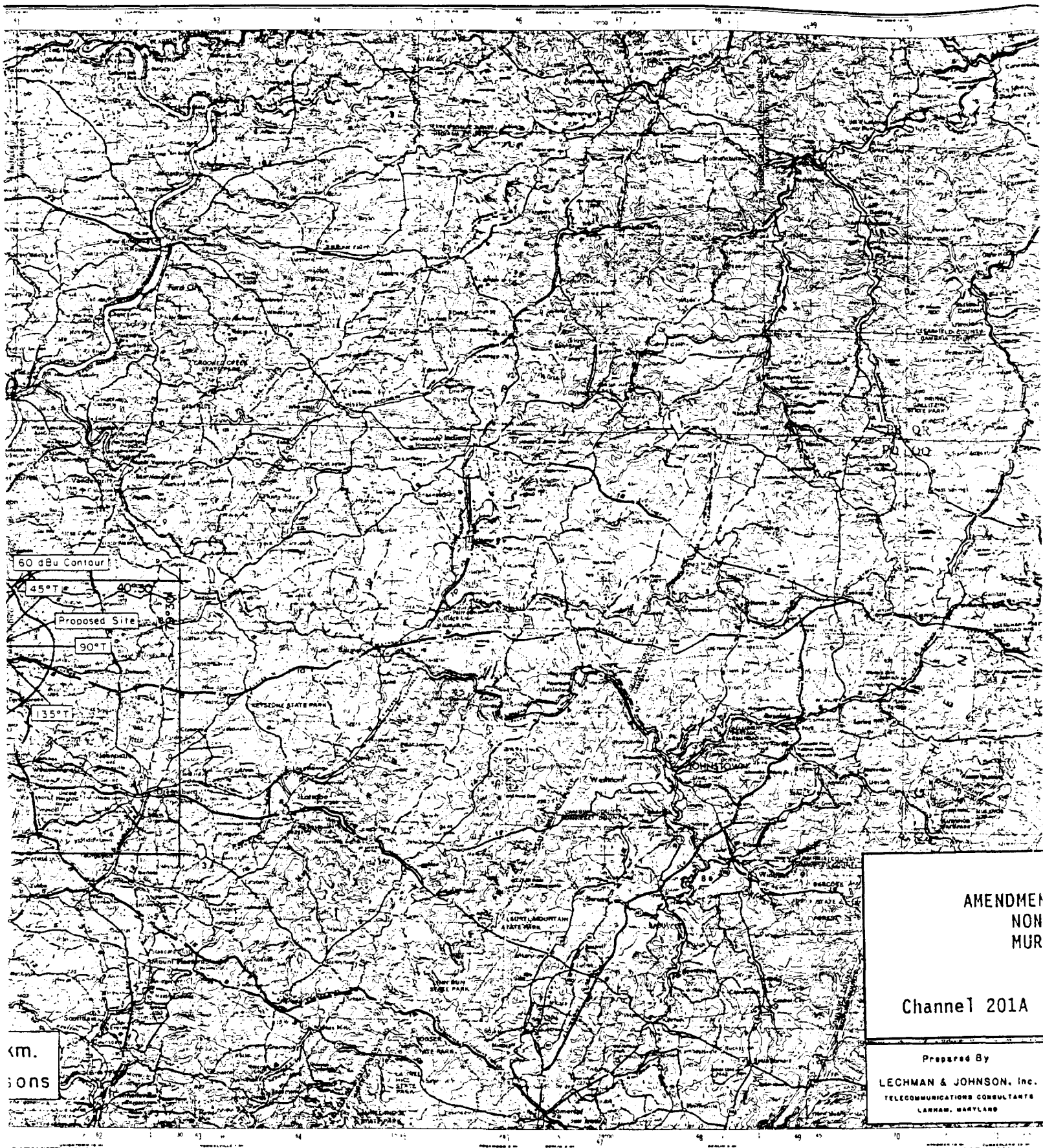
LOCATION DIAGRAM



STATION INFORMATION		TO USE A STANDARD APPROVED BY THE FCC FOR IDENTIFICATION	
NAME	CALL LETTERS	NAME	CALL LETTERS
HE'S ALIVE, INC.	PD QR	NAME	CALL LETTERS
HE'S ALIVE, INC.	PD QR	NAME	CALL LETTERS
HE'S ALIVE, INC.	PD QR	NAME	CALL LETTERS
HE'S ALIVE, INC.	PD QR	NAME	CALL LETTERS
HE'S ALIVE, INC.	PD QR	NAME	CALL LETTERS
HE'S ALIVE, INC.	PD QR	NAME	CALL LETTERS
HE'S ALIVE, INC.	PD QR	NAME	CALL LETTERS
HE'S ALIVE, INC.	PD QR	NAME	CALL LETTERS
HE'S ALIVE, INC.	PD QR	NAME	CALL LETTERS

PITTSBURGH, PENNSYLVANIA

PITTSBURGH



60 dBu Contour
45°T
Proposed Site
90°T
135°T

AMENDMENT
NON
MUR

Channel 201A

Prepared By

LECHMAN & JOHNSON, Inc.
TELECOMMUNICATIONS CONSULTANTS
LAWAN, MARYLAND

km.
miles

LEGEND

Figures in red denote approximate distances in miles between stops.
BOSTON
RICHMOND
EVANSTON
Newman
Baltimore

Scale 1:250,000

CONTOUR INTERVAL 100 FEET
WITH SUPPLEMENTARY CONTOURS AT 50 FOOT INTERVALS

TRANSVERSE MERCATOR PROJECTION

BLACK NUMBERS ALONG LINES INDICATE THE ELEVATION IN FEET OF THE HIGHEST POINT OF THE LINE. (SEE NOTE 1)
1000 METRIC EQUIVALENTS (FROM 1000 METERS TO 10000 METERS) ARE GIVEN IN METERS. (SEE NOTE 2)
FOR THE CENTER OF THE BEST FIT TO THE DATA. (SEE NOTE 3)

FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092

LOCATION DIAGRAM

